



Kansas Chemical Usage

Kansas Agricultural Statistics

Cooperating with the Kansas Department of Agriculture

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2009 Agricultural Chemical Usage

This report provides statistics about on-farm and post-harvest fertilizer and pesticide use and pest management practices. In the fall of 2009, the National Agricultural Statistics Service (NASS) collected data about chemical use and pest management on acres of conventional and organic wheat that was planted for the 2009 crop year. These data were collected as part of the Agricultural Resource Management Survey.

Nitrogen, the most widely used **fertilizer** ingredient, was applied to 94 percent of wheat planted acres, at a rate of

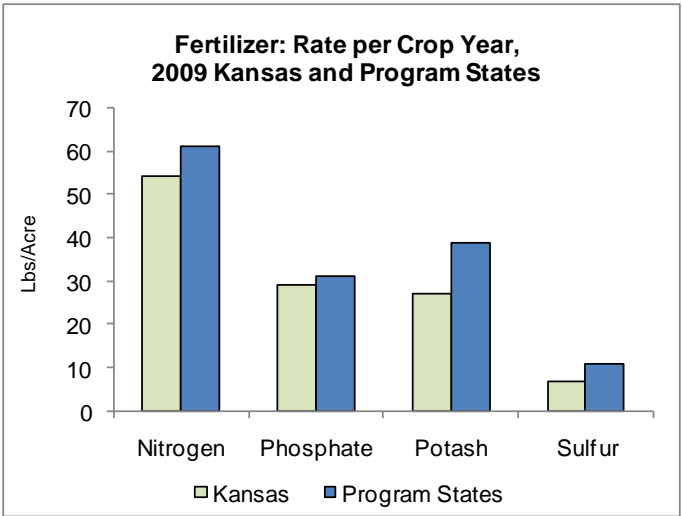
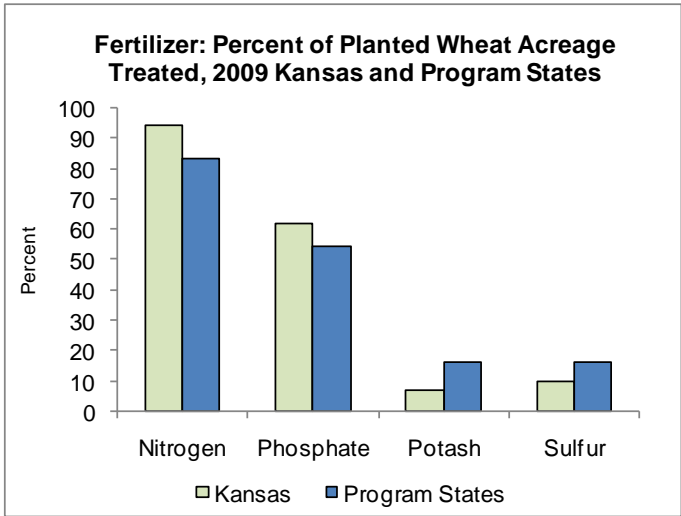
36 pounds per acre. Phosphate was applied to 62 percent of acres, at a rate of 29 pounds per acre. Potash and Sulfur were used less extensively.

The most commonly applied **herbicide** on a per acre basis was Metsulfuron-methyl, at 22 percent with average application rates of .002 pound per acre per year. The herbicide with the most quantity applied was Glyphosate isopropylamine salt at a rate of 1.453 pounds per acre, per crop year.

Winter Wheat: Acreage, Fertilizer and Herbicide Applications, Selected States, 2009

State	Planted Acreage	Nitrogen			Phosphate			Potash			Herbicide
		Area Applied	Appli-cations	Rate Per Application	Area Applied	Appli-cations	Rate Per Application	Area Applied	Appli-cations	Rate Per Application	Area Applied
	1,000 Acres	Percent	Number	Pounds/acre	Percent	Number	Pounds/acre	Percent	Number	Pounds/acre	Percent
Colorado	2,600	54	1.5	24	33	1.0	17	(2)	(2)	(2)	75
Kansas	9,300	94	1.5	36	62	1.0	29	7	1.0	27	51
Missouri	780	91	1.8	54	75	1.0	51	80	1.0	64	42
Nebraska	1,700	84	1.5	37	65	1.0	29	6	1.2	14	61
Oklahoma	5,700	95	1.6	34	55	1.0	29	13	1.0	11	53
Total ¹	37,045	83	1.5	40	54	1.0	30	16	1.0	37	60

¹ Program States include: CO, ID, IL, KS, MI, MN, MO, MT, NE, ND, OH, OK, OR, SD, TX, and WA. ² Missing data not published.



Winter Wheat: Agricultural Chemical Applications, Kansas, 2006 & 2009 ¹

Agricultural Chemical	Area Applied		Applications		Rate per Application		Rate per Crop Year		Total Applied	
	2006	2009	2006	2009	2006	2009	2006	2009	2006	2009
Herbicides:	Percent		Number		Pounds/acre		Pounds/acre		1,000 Lbs.	
2,4-D, 2-EHE	10	16	1.3	1.7	0.340	0.319	0.450	0.533	434	776
2,4-D, dimeth. salt	9	9	1.3	1.5	0.418	0.478	0.560	0.739	480	640
Chlorsulfuron	16	17	1.0	1.0	0.011	0.011	0.011	0.011	18	17
Dicamba, dimeth salt	(2)	6	(2)	1.9	(2)	0.112	(2)	0.210	(2)	107
Dicamba, sodium salt	5	4	1.0	1.6	0.091	0.081	0.091	0.128	47	52
Glyphosate iso. salt	14	16	1.7	2.1	0.519	0.687	0.892	1.453	1,207	2,215
Metsulfuron-methyl	25	22	1.0	1.0	0.002	0.002	0.002	0.002	6	4
Thifensulfuron	12	6	1.0	1.0	0.005	0.006	0.005	0.006	6	4
Tribenuron-methyl	12	6	1.0	1.0	0.003	0.003	0.003	0.003	3	2

¹ Planted acres in 2009 for Kansas were 9.30 million acres. ² Missing data not published.



Pest Management Practices

Wheat growers reported using several management practices to aid in the deterrence of pests through prevention, avoidance, monitoring and suppression. The top practices used for Conventional Winter Wheat and Organic Winter Wheat were the same for prevention of pests and monitoring of pests. The top practices used in pest management for Conventional Winter Wheat were very similar to those of the Program States. The Organic Winter Wheat practices were slightly different than those of Program States, as seen in the table below.

In Kansas for Conventional Winter Wheat, the top practice used for prevention of pests was cleaning of equipment and implements after field work to reduce spread of pests. The top practice for avoidance of pests was rotating crops

during the past 3 years. The top practice used to monitor pests was scouting for weeds, and the top practice used to suppress pests was the use of ground covers, mulches, or other physical barriers.

To aid in the prevention of pests, 54 percent of the Organic Winter Wheat farms in Kansas cleaned equipment after field work to reduce the spread of pests. In addition, 61 percent of Organic Winter Wheat farms in Kansas adjusted planting or harvesting dates in order to avoid pests, 100 percent scouted for weeds in order to monitor for pests and 82 percent suppressed pests by maintaining buffer strips or border rows to isolate organic or non-organic fields.

Kansas Top Pest Management Practices by Percent of Planted Acres in Comparison to Program States

Conventional Winter Wheat	Top Practice	Kansas	Program States ¹
Prevention	Equipment and implements cleaned after field work to reduce spread of pests	48	47
Avoidance	Rotated crops during the past 3 years	39	36
Monitoring	Scouted for weeds	84	84
Suppression	Ground covers, mulches, or other physical barriers maintained	30	39

Organic Winter Wheat	Top Practice	Kansas	Program States ¹
Prevention	Equipment and implements cleaned after field work to reduce spread of pests	54	49
Avoidance	Planting or harvesting dates adjusted	61	36
Monitoring	Scouted for weeds	100	78
Suppression	Buffer strips or border rows maintained to isolate organic non-organic	82	55

¹ Program States include: CO, ID, IL, KS, MI, MN, MO, MT, NE, ND, OH, OK, OR, SD, TX, and WA.

Agricultural chemical use and pest management practices data contained in this publication are a summary of data published in USDA NASS Agricultural Chemical Usage – 2009 Field Crops Summary on the internet at <http://www.nass.usda.gov> dated May 19, 2010.